

Notice of Allowability

Application No.

10/668,845

Examiner

William K Cheung

Applicant(s)

WANG ET AL.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to Examiner's Amendment.
2. ☒ The allowed claim(s) is/are 1-3 and 6-17.
3. ☐ The drawings filed on _____ are accepted by the Examiner.
4. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
 - a) ☐ All b) ☐ Some* c) ☐ None of the:
 1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

5. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
 6. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
 - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
 - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
 - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
7. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date _____
4. ☐ Examiner's Comment Regarding Requirement for Deposit
of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☐ Interview Summary (PTO-413),
Paper No./Mail Date _____
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____

DETAILED ACTION

EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with attorney Shao-Hua Guo on March 23, 2004.

2. Claim 1 (line 5), insert "in a solvent selected from the group consisting of alcohols, ethers, esters, ketones, glycol ethers, glycol ether esters, aliphatic and aromatic hydrocarbons, and mixture thereof," after "the total mount of monomers,".
3. Cancel claims 4-5.
4. Claims 6, 7, 8 (line 1), replace "4" with "1".
5. In view of Examiner's Amendment herein, claims 1-3, 6-17 are pending.

6. In view of Examiner's Amendment herein, the rejection of claims 1-4, 9-17 under 35 U.S.C. 102(b) as being anticipated by Guo (US 5,475,073) is withdrawn. Further, the rejection of claims 5-8 under 35 U.S.C. 103(a) as being unpatentable over Guo (US 5,475,073) is withdrawn.

Allowances

7. Claims 1-3, 6-17 are allowed.

8. The following is an examiner's statement of reasons for allowance:

As of the date of this office action, the examiner has not located or identified any reference that can be used singularly or in combination with another reference including the closest prior art of Guo (US 5,475,073) to render the present invention anticipated or obvious to one of ordinary skill in the art.

*The invention of claims 1-3, 6-17 relates to a **method for preparing a low-yellowing acrylic polyol**, said method comprising **free radically copolymerizing an allylic alcohol, an alkyl acrylate or methacrylate**, and optionally a vinyl comonomer selected from the group consisting of vinyl aromatics, vinyl ethers, and vinyl esters in an **initiator concentration less than or equal to 0.8 wt % of the total amount of***

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monomers, in a solvent selected from the group consisting of alcohols, ethers, esters, ketones, glycol ethers, glycol ether esters, aliphatic and aromatic hydrocarbons, and mixture thereof," after "the total mount of monomers, wherein the resulting acrylic polyol has an APHA color increase less than 100% when mixed with 1.5 wt %, based on the amount of the acrylic polyol, of an UV light stabilizer.

The closest prior art Guo (abstract; col. 2, line 32-49; col. 3, line 39-42; col. 4, line 15-26; col. 4, line 46-54, col. 6, line 52 to col. 7, line 12) discloses a method for preparing an acrylic polyol free radically comprising an allylic alcohol, an alkyl acrylate, and methacrylate. The product of the process has a number average molecular weight of 1585 and a polydispersity of 2.7 computed from the disclosed M_n and M_w information. Guo (col. 4, line 22) clearly disclose a process that involves using free radical initiator within the range of about 0.1 to about 10 weight percent which include a significant portion of the claimed initiator concentration. However, the prior art Guo is silent on a method which involves using a solvent selected from the group consisting of alcohols, ethers, esters, ketones, glycol ethers, glycol ether esters, aliphatic and aromatic hydrocarbons, and mixture thereof. Therefore, it would not be apparent to one of ordinary skill in art to use the process teachings in Guo to obtain the present invention of claims 1-3, 6-17. Further, in view of "unexpected results" in a reduction of color in the product produced (specification, page 11, Table 1), applicants have clearly shown the criticality of the using a solvent in the claimed process. The invention of claims 1-3, 6-17 is allowed.

In light of the above discussion, it is evident as to why the present claims are patentable over the prior art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, and to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William K Cheung whose telephone number is (571) 272-1097. The examiner can normally be reached on Monday-Friday 9:00AM to 2:00PM; 4:00PM to 8:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David WU can be reached on (571) 272-1114. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



William K. Cheung

Patent Examiner

April 3, 2004